

Listing of the Claims

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

1-52 (cancelled)

53. (Currently amended) A method for detecting a bladder cancer in a human test subject, said method comprising:

(a) ~~Quantifying in RNA of a blood sample from said test subject;~~ a level of RNA encoded by an the gene insulin-like growth factor binding protein 7 (IGFBP7) gene in said sample a blood sample from said test subject; and

(b) comparing said ~~quantified level of step (a)~~ with a quantified level of ~~control~~ RNA encoded by said gene in ~~RNA of blood samples from control subjects~~ having said bladder cancer,

wherein ~~said comparison of a determination in~~ step (b) of ~~said quantified a statistically significant similarity between said~~ level of step (a) ~~with and~~ said quantified level of RNA in blood from said control subjects is indicative of said bladder cancer in said human test subject.

54.-62 (Cancelled)

63. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having said bladder cancer; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control

subjects not having said bladder cancer, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

64. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

- (a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in a blood sample from said test subject;
- (b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and
- (c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

65. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

- (a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in a blood sample which has not been fractionated into cell types, from said test subject; and

- (b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer, wherein a determination in step (b) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects is indicative of said bladder cancer in said human test subject.

66. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

- (a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in a blood sample, which has not been fractionated into cell types, from said test subject;
- (b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having said bladder cancer; and
- (c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having said bladder cancer, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

67. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

- (a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in a blood sample, which has not been fractionated into cell types, from said test subject;
- (b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and
- (c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

68. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in unfractionated cells of a lysed blood sample from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer, wherein a determination in step (b) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects is indicative of said bladder cancer in said human test subject.

69. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in unfractionated cells of a lysed blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having said bladder cancer; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having said bladder cancer, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

70. (New) A method for detecting a bladder cancer in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by an insulin-like growth factor binding protein 7 (IGFBP7) gene in unfractionated cells of a lysed blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having said bladder cancer,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having said bladder cancer is indicative of said bladder cancer in said human test subject.

71. (New) The method of any one of claims 67, 68 and 69, wherein said quantified level of RNA in blood from said control subjects having said bladder cancer is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

72. (New) The method of claim 68, wherein said quantified level of RNA in blood from said control subjects not having said bladder cancer is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

73. (New) The method of claim 69, wherein said quantified level of RNA in blood from said healthy control subjects is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

74. (New) The method of any one of claims 70, 71 and 72, wherein said quantified level of RNA in blood from said control subjects having said bladder cancer is a level of RNA encoded by said gene in unfractionated cells of a lysed blood sample.

75. (New) The method of claim 71, wherein said quantified level of RNA in blood from said control subjects not having said bladder cancer is a level of RNA encoded by said gene in unfractionated cells of a lysed blood sample.

76. (New) The method of claim 72, wherein said quantified level of RNA in blood from said healthy control subjects is a level of RNA encoded by said gene in unfractionated cells of a lysed blood sample.

77. (New) The method of any of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said quantifying of said level of step (a) is effected by quantifying a level of RNA encoded by said gene in a sample of RNA isolated from said blood sample of step (a).

78. (New) The method of any one of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said quantified level of RNA in blood from said control subjects is a level of RNA encoded by said gene in samples of RNA isolated from blood from said control subjects.

79. (New) The method of any one of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said quantifying of said level of step (a) is effected by quantifying a level of cDNA corresponding to RNA encoded by said gene.

80. (New) The method of claim 79, wherein said quantified level of RNA in blood from said control subjects is a level of cDNA corresponding to RNA encoded by said gene.

81. (New) The method of any one of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said quantifying of said level of step (a) is effected using an array.

82. (New) The method of claim 81, wherein said quantified level of RNA in blood from said control subjects is a level of RNA determined using an array.

83. (New) The method of claim 79, wherein said quantifying of said level of cDNA is effected using quantitative PCR.
84. (New) The method of claim 83, wherein said quantified level of RNA in blood from said control subjects is a level of cDNA corresponding to RNA encoded by said gene, and wherein said quantifying of said level of cDNA is effected using quantitative PCR.
85. (New) The method of any one of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said quantifying of said level of step (a) is effected by quantifying a level of RNA encoded by said gene relative to a level of RNA encoded by a housekeeping gene.
86. (New) The method of claim 85, wherein said quantified level of RNA in blood from said control subjects is a level quantified relative to a level of RNA encoded by said housekeeping gene.
87. (New) The method of any one of claims 55, 65, 66, 67, 68, 69, 70, 71 and 72, wherein said bladder cancer is early stage bladder cancer.